

*SC NAACP v. Alexander,*  
D.S.C. Case No. 3:21-cv-03302-MGL-TJH-RMG

# EXHIBIT 5

# Report on South Carolina Congressional Districts

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## 1 Assignment

I am a professor of Mathematics and a Senior Fellow in the Jonathan M. Tisch College of Civic Life at Tufts University. My previous report in this case is dated April 11, 2022, and it contains a full account of my relevant background and qualifications.

In the current report, I have been asked to provide a brief response to the Expert Report of Sean P. Trende, dated April 18, 2022.

## 2 Summary

- The state's plan is described by Mr. Trende as placing top priority on core retention, as measured by the very high percentage of the population whose district assignment in Enacted2022 is identical to their district assignment in the "benchmark" Previous2012. But South Carolina's demographics and electoral dynamics, as well as the national legal framework, have all shifted in the last ten years. Thus a map with very high core retention can be dilutive of Black voting power while its predecessor was acceptable under a different set of facts and rules. That is the case with the current South Carolina Congressional maps.
- Even if core retention is elevated to the top echelon of districting priorities, my report confirms that this does not lock in the dilutive effects found in the state's plan. The alternative plan shown in my previous report (Section 6.2, incl. Figure 11) is just one example—92% of the population is assigned to districts exactly as in Enacted2022, and indeed the alternative plan mainly differs in a single boundary between two districts, but this plan nonetheless outperforms the Enacted2022 plan in terms of the ability of Black voters to elect their candidates of choice.
- The state's plan is described by Mr. Trende as placing a high priority on "repairing" split counties and precincts. But the number of split counties is similar to that in the benchmark plan, as is the number of split precincts (though the count is described misleadingly in the Trende Report). By contrast, as detailed in the previous report and below, there was another Congressional plan proposed during the legislative process—the Harpootlian map—with substantially fewer political subdivision splits. This map is comparable or superior to the state's plan Enacted2022 in all traditional districting principles (Section 4 of previous report), and provides measurably greater minority opportunity to elect. This plan was considered and rejected by the legislature.

## 5 Conclusion

In the large, indications of racial gerrymandering are easy to detect in the Enacted2022 plan. In the changes made against the map from ten years prior, Jim Clyburn's CD 6 saw its Black voting age population share markedly diminished, dropping from 52.5% BVAP to 46.9%, a difference of 5-6 percentage points. However, though the adjacent districts CD 5 and CD 7 were next in line in BVAP proportion, each having over 25% BVAP, neither of these received an increase in their BVAP share—instead, CD 7 remained essentially untouched while CD 5 actually lost a percentage point.<sup>4</sup>

	CD 1	CD 2	CD 3	CD 4	CD 5	CD 6	CD 7
Previous2012	0.173	0.239	0.174	0.183	0.257	0.525	0.254
Enacted2022	0.174	0.254	0.176	0.190	0.247	0.469	0.254
Harpootlian	0.212	0.219	0.156	0.162	0.337	0.497	0.184

Table 1: **BVAP shares by district.** (Repeated from previous report, Table 1.)

Rather than being assigned to CD 5 or CD 7, the Black population was cracked over multiple districts in a manner that ensured that the opportunity to elect candidates of choice would remain out of reach. This was not done merely by chance, but through selective decisions to smooth and heal splits in areas more heavily populated with White voters, while leaving areas with greater Black population shares illogically split.

Indeed, the randomized districting analysis performed in Section 7 of my prior report, which was not discussed by Mr. Trende, shows that the state's plan is far more of an outlier in its performance on the elections most probative for Black voters than it is in a generic general election. (See especially previous Figure 12.)

Finally, the Trende Report is completely silent on comparing the state's chosen plan to the other options that were before the legislature at the time of adoption, especially the Harpootlian plan. That alternative plan is generally superior to the state's plan on traditional principles (particularly splits and compactness, shown in Section 4 of earlier report and Section 4.1 above) while showing deference to communities of interest identified in the public record (quoted in Appendix B) and affording measurably greater opportunity for Black voters to elect candidates of choice (previous Section 7).

I also presented an alternative plan (previous Section 6.2), which bears over 92% resemblance to the state's plan while demonstrably reducing its fence-out effect for Black voters' candidate preferences. This shows that even the elevation of core preservation to the highest echelon of districting priorities does not need to lock in the racially dilutive impact of the state's plan. Instead, the strict confinement of Black electoral opportunity to a single district—CD 6—emerges as the leading hypothesis for the design principles that drove the construction of the Enacted2022 plan.

<sup>4</sup>Meanwhile, South Carolina has been growing less White overall, with the WVAP share dropping from 66.7% in 2010 to 64.9% in 2020. Greater Charleston and the Lowcountry region have seen some of the greatest increases in BVAP overall. Demographics and trends are discussed in Section 2 of my prior report.